

Neat-O!

Building a Massive Wireless Network

Clients need a robust home network system these days. Especially for coverage over a 10,000-square-foot house whose owner is requesting two separate, but equally bandwidth-intensive, networks.

Apparently one integrator was not quite up to the challenge, because Richardson, Texas-based Eco High Fidelity had to answer the call to make the original project work properly — and then some.

“A client had a wireless network in his home that he wasn’t satisfied with,” says Eco High Fidelity lead technician Jonathan Hughes. “He wanted the ability to stream four Kaleidescape players simultaneously, needed Crestron control of a number of devices throughout the home and wanted to have a guest computer network that was separate from the main network. He also wanted control over what web sites various family members would have access to.”

The original wireless network installed was simply not holding its own with those key control and distributed A/V elements. The Kaleidescape server would lock up and constantly need resetting, according to Hughes, the Crestron TMPC-8X remotes were “useless,” and there were several IP control issues.

Integrating an enterprise-grade network, or essentially two in this case, was a daunting task, but Hughes notes that the company had previous success in scenarios with large houses and large automation systems.

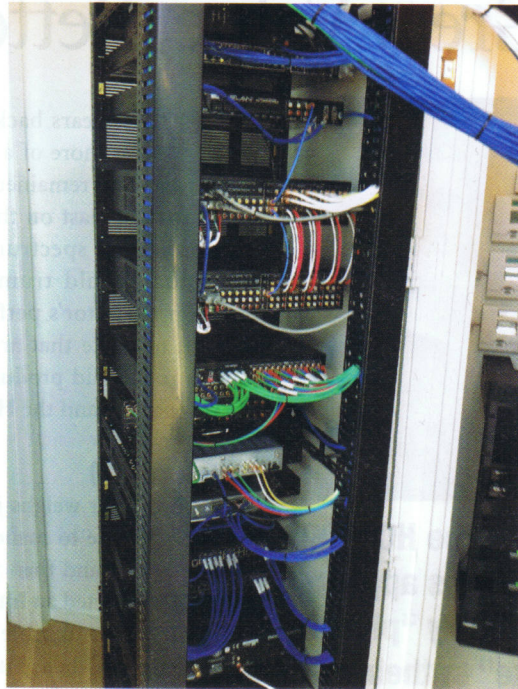
“Clearly the networking equipment had to be replaced,” Hughes says of the takeover project. “I had multiple positive experiences with Pakedge in previous large-scale installs that used Crestron, Elan and Savant automation in homes of around 4,000 to 8,000 square feet, as well as success with Kaleidescape video servers in these instances, so I went with Pakedge for this particular application.”

Hughes overhauled the networking system by incorporating: a WAP-VKIT-D/ABGN-5 with five wireless access points (WAPs) throughout the home; an RSB-KIT preconfigured audio/video bridging system; two SW24-GBM 24-port fully managed gigabit switches; and a pair of SW16-GB 16-port Ethernet SFP switches.

The Eco High Fidelity technician explains that he configured the network with separate VLANs for the Crestron controllers, the main computer network and a guest network. Pakedge’s Virtual Cell Technology allows each device to “see” a single MAC address over the five WAPs installed throughout, facilitating “seamless roaming everywhere in the home with no dropouts or handoffs.”

Now the client has no trouble using the TMPC-8X remotes or Kaleidescape server, Hughes reports.

“The result was night and day. The client instantly noticed the changes in performance — it would be hard not to,” says Hughes. “Now the system works perfectly instead of having never-ending interruptions in service, or no functionality at all.” —Arlen Schweiger



The original wireless network was insufficient, so Eco High Fidelity in Richardson, Texas, used Pakedge equipment to create VLANs to support Crestron and Kaleidescape.

Congratulations to Jonathan Hughes for a Neat-O! installation. We’re looking for over-the-top projects. Cool, unique, tidy or meticulous, share your best work with our readers. E-mail your submissions, with high-resolution images, to managing editor Arlen Schweiger at aschweiger@ehpub.com.